

Notice of Allowability

Application No.

10/754,060

Examiner

Thinh T. Nguyen

Applicant(s)

LIAO ET AL.

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/8/2005.
2. ☒ The allowed claim(s) is/are 15-21.
3. ☒ The drawings filed on 07 January 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


David Nelms
Supervisory Patent Examiner
Technology Center 2800

DETAILED ACTION

1. Claims 15-28 are presented for examination including new additional claim 22-28.
2. Newly submitted claims 22-28 are directed to inventions that is independent or distinct from the invention originally claimed for the following reasons:

I/ **Species I** : Claims 15-21 directed toward a thin film transistor having a buffer layer with **active layer with source/drain regions formed therein and an unspecified conductive layer.**

II/ **Species II** : Claims 22-28 directed toward a thin film transistor having a buffer Layer with **unspecified active layer and conductive layer serving as a gate.**

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 22-28 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1. 142(b) and MPEP 821.03.

Examiner's Amendment.

3. A/An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. to ensure consideration of such an amendment, it **MUST** be submitted no later than the

payment of the issue fee: Claims 1-14 are cancelled as **withdrawn non-elected claims**.

Claims 22-28 are also cancelled since they are directed to non-elected inventions (see paragraph 2 in the Office Action).

B/ Change the title to – THIN FILM TRANSISTOR WITH BUFFER LAYER FOR PROMOTING ELECTRON MOBILITY --.

Reason for allowance

4. Claims 15-21 are allowed. The following is an examiner's statement of reason for allowance: None of the references of record teaches or suggests the claimed THIN FILM TRANSISTOR WITH BUFFER LAYER FOR PROMOTING ELECTRON MOBILITY having The limitations:

-- "a buffer layer, comprising: an amorphous layer, deposited on the substrate', and a crystallized layer, deposited on the amorphous layer an active layer with source/drain regions formed therein, deposited on the crystallized layer; an insulating layer, covering on the active layer, the amorphous layer, crystallized layer and the side walls of the active layer; --

and all other limitations as recited in claim 15.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Art Unit: 2818

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thinh T Nguyen whose telephone number is 703-305-0421. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 703-308-4910. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval [PAIR] system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thinh T Nguyen



Art unit 2818



David Nelms
Supervisory Patent Examiner
Technology Center 2800